



CTPP 2000 Status Report

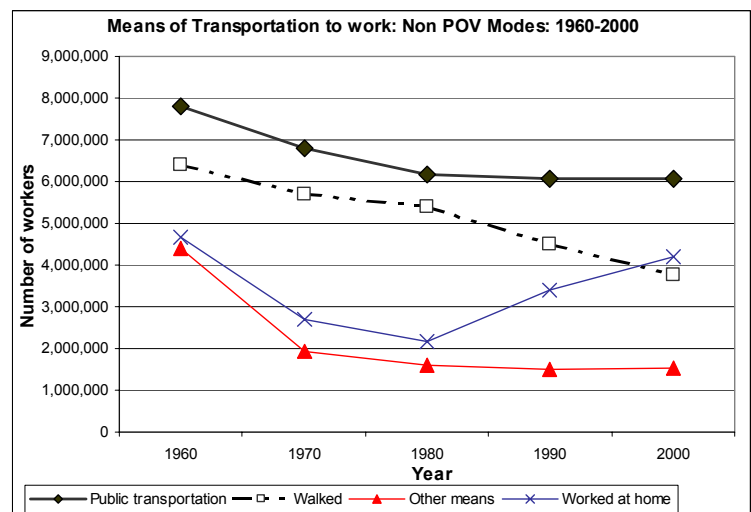
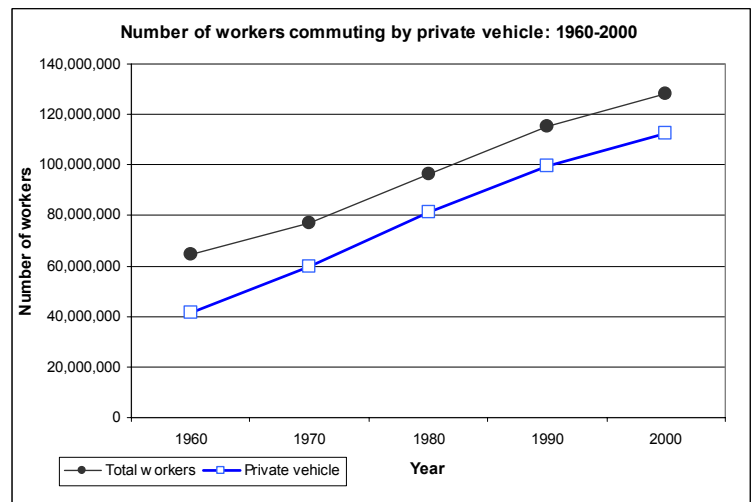
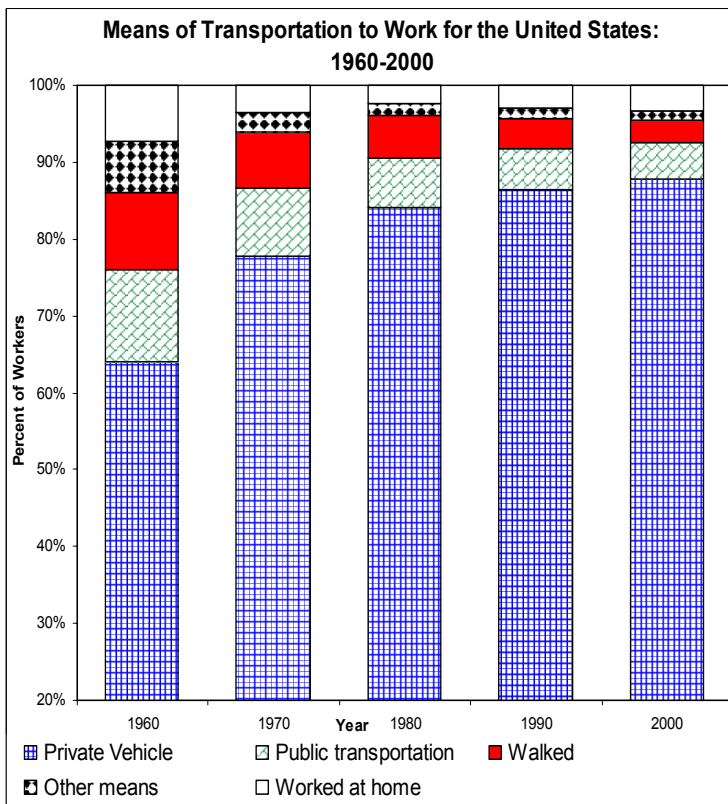
September 2002

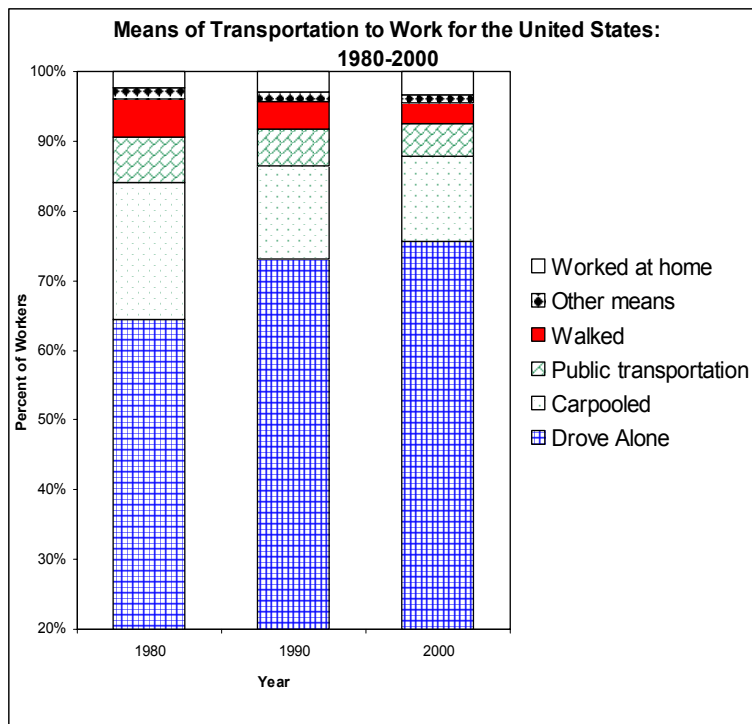
U.S. Department of Transportation
Federal Highway Administration
Bureau of Transportation Statistics
Federal Transit Administration
In cooperation with the TRB Census Subcommittee

Journey to Work Trends : 1960-2000

By Nanda Srinivasan, Cambridge Systematics Inc.

In the past forty years, the total number of workers reported in the U.S. Census increased from 65 million to 128 million. Since 1980, the number of workers who carpooled for their usual journey-to-work has declined from 19 million to 15.6 million workers. Since 1980, number of workers working at home increased from 2 million to 4 million workers.





Data Sources:

1. 1960 to 1990 Census data was obtained from Census Bureau website at <http://www.census.gov/population/socdemo/journey/mode6790.txt>
2. Census 2000 data was obtained from the "Demographic Profiles" release: <http://www.census.gov/Press-Release/www/2002/demoprofiles.html>

The CTPP Working Group created summary sheets comparing 1990 and 2000 commute data for all the states, and 49 of the largest MSAs (population greater than 1 million). The Metropolitan Transportation Commission, Oakland has made these files available at their FTP site at: <ftp://ftp.abag.ca.gov/pub/mtc/census2000/DP2-4/National/>

CTPP Data Release Schedule – Revised August 8, 2002

By Fabian Sanchez, U.S. Census Bureau

Prior to the CTPP2000, Summary File 3 data (Census long form or sample data) will be released on a flow basis by state between August and September 2002. For more information about the SF3 release and for updates visit the following homepage: <http://www.census.gov/Press-Release/www/2002/sumfile3.html>. As of August 30, 2002 the SF3 files have been released for twenty-six states. The Census Bureau expects to release data for all the states by the end of September 2002.

Because the CTPP2000 schedule is dependent on the SF3 data, the schedule for the CTPP release has been revised as follows:

CTPP Part 1 – Residence Based Tables: November 2002 to January 2003

CTPP Parts 2 and 3 – Work End and Worker Flow Tables: Beginning in April 2003

CTPP Data Access Tool Update

The contract for the CTPP Access Tool (CAT), the interface that will be used to access the CTPP2000 data, was awarded on June 28, 2002. On July 10, 2002, the Census Bureau conducted the kick off meeting with CENTECH, Beyond 20/20 and Digital Engineering Corporation. CENTECH is the prime contractor, Beyond 20/20 is responsible for the tabulation interface and Digital Engineering Corporation is responsible for generating the mapping/GIS interface. The Census Bureau will try to have a prototype or early version of the software available for the September TRB Conference on Transportation Planning for Small and Medium-sized Communities in Cincinnati, Ohio.

Transit Ridership and Transit Commuting Trends: Why Are They Different?

Chuck Purvis, Metropolitan Transportation Commission, Oakland, California; and past chair of TRB Committee on Urban Transportation Data & Information Systems.

1. Trends in Transit Commuting

One of the more interesting results from Census 2000 is the lack of change, at the national level, in the total number of commuters taking public transit to work. National figures on transit commuters, excluding taxicab commuters, is not yet available, but the data available so far indicates no change in the number of transit commuters between 1990 and 2000. This compares to an increase of 11.5 percent in the total number of those who work at home). These national trends mask local and regional variation across the U.S.

Transit commute shares for the U.S. have fallen from 6.2 percent in 1980 to 4.6 percent 2000 (Table 1). The number of transit commuters has been stable at about 6 million from 1980 to 2000.

Table 1

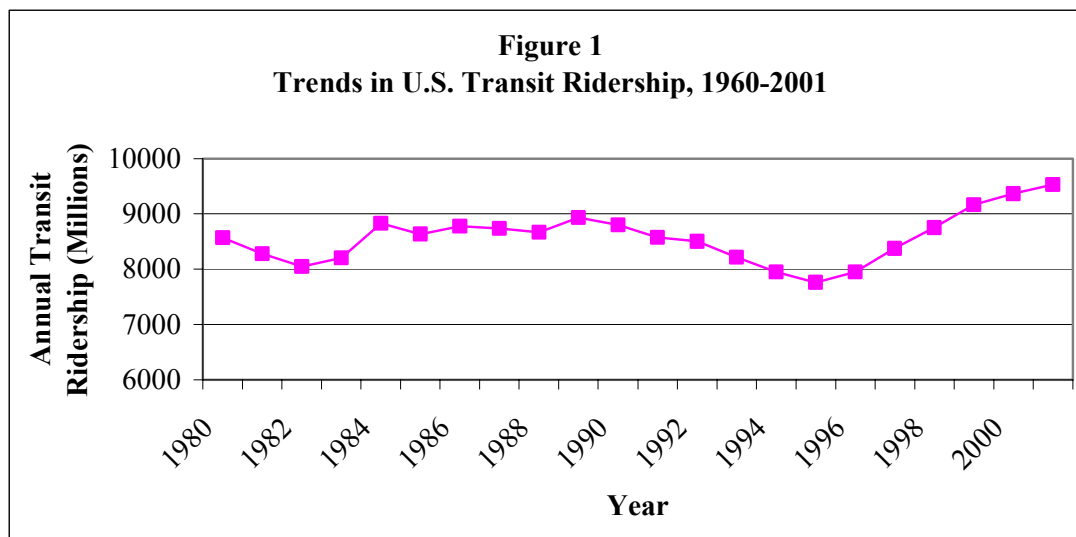
U.S. Transit Ridership (APTA) and Transit Commuting (Census) Trends

Year	Transit Ridership, APTA (Millions of Boardings)	Transit Commuters*, Decennial Census (# of Workers)	Total Commuters, Decennial Census (# of Workers)	Transit Commute Share, Decennial Census
1980	8,567	6,007,728	96,617,296	6.2%
1990	8,799	5,890,155	115,070,274	5.1%
2000	9,363	5,873,477*	128,279,228	4.6%

* Transit commuters excludes taxicab commuters. Census 2000 data on U.S. taxicab commuters is not yet available (August 2002), and is estimated at 194,226 based on the C2SS. Census 2000 data for U.S. public transportation commuters including taxicabs is 6,067,703.

2. Trends in Transit Ridership

In contrast to transit commute statistics, data on overall transit ridership shows significantly different patterns (Table 1). Annual transit ridership statistics compiled by the American Public Transportation Association (APTA) show 8.6 billion annual



boardings in 1980, increasing to 8.8 billion annual boardings by 1990. Transit ridership declined by 12 percent between 1990 and 1995, but rebounded by 21 percent between 1995 and 2000 (Figure 1).

3. Comparing Trends in Ridership to Trends in Commuting

Comparing transit ridership (boardings) and transit commuting (workers) shows conflicting patterns: ridership gains between 1980 to 1990, and between 1990 to 2000, but a consistent decrease in the number of national transit commuters since 1980 (See Table 2).

Table 2:
Percent Change in Transit Ridership and Transit Commuting

Year	Transit Ridership (Millions of Boardings)	Transit Commuters (Number of Workers)
1980-90	+2.7%	-2.0%
1990-00	+6.4%	-0.3%

So, how can the 6.4 percent increase in national transit ridership, 1990 to 2000, as reported by APTA, be reconciled with no change in national transit commuting, as derived from the 1990 and 2000 Censuses?

Several key points about transit commuting and transit boardings need to be stated.

1. Census counts workers not trips. The decennial Census Long Form is a self-reported tally of workers of how they **usually** commuted from their home-to-work “last week.” A worker who uses transit one or two days a week, will most likely choose another travel mode on the Census questionnaire.

2. Transit boardings count each time a person boards a transit vehicle, including transfers. These are also known as “unlinked trips” in transit planning jargon. A “linked transit trip” may include one or multiple boardings to go from a typical origin, say, home, to a destination such as work. A good rule of thumb is to assume about 1.3 boardings per linked trip. NYCTA initiated free bus/subway transfers in 1997 which

made a large difference in national counts of unlinked trips. However, we do not have a standard measure to determine if system design changes are increasing or decreasing the number of boardings needed to complete one linked trip.

3. All transit trips are not commute trips. In fact, a majority of U.S. transit trips are for non-work purposes. The 1990 National Personal Transportation Survey (NPTS) indicates that 42.6 percent of transit trips are for the purpose of “earning a living” (for our purposes, “commute trips”); and the 1995 NPTS indicate that only 37.2 percent of transit trips are for “earning a living.”

Table 3

Estimates of Annual Work and Non-Work Transit Boardings, 1980-2000

	Annual Work Boardings	Annual Non-Work Boardings	Annual Total Boardings	Work Trip Share of Transit Boardings
1980	3,827	4,740	8,567	44.7%
1990	3,752	5,047	8,799	42.6%
2000	3,741	5,622	9,363	40.0%
% Change, 1990-00	-0.3%	11.4%	+6.4%	

Trips are in millions. The annual work and non-work boardings are estimates based on simple methodology of converting census transit commuters to annual work boardings using a 637 multiplier. The “Work Trip Share” is calculated by dividing the estimate of “Annual Work Boardings” by APTA’s reported “Annual Total Boardings.”

4. Local Area Reconciliation of Transit Ridership and Transit Commuting

This analysis of census-based transit commuters and total ridership statistics should also be tested at the metropolitan and operator level, if at all possible. In addition to statistics from the U.S. census and overall ridership data, it is best to have both on-board transit surveys and household travel surveys to analyze changes in trip purpose share for transit trips, and changes in transit boardings per linked trip.

In the absence of local household travel surveys or transit on-board surveys, data from the 2001 NHTS will be invaluable in providing the data linkage to bridge between census and APTA ridership statistics.

In summary, the short answer is that “yes” –increases in transit ridership and decreases in transit commuting can be “right.” It takes careful data analysis and an understanding that transit ridership and transit commuting are two totally different and unique ways of examining our transportation systems.

Additional web resources of interest:

1990 and 1995 NPTS: <http://www-cta.ornl.gov/npts/>

2001 NHTS: <http://www.bts.gov/nhts/>

APTA Ridership Statistics: <http://www.apta.com/stats/ridershp/>

Please Note: This article is partially based on some of the ideas shared on the CTPP-News internet mailing list (listserv) this past July 2002. Thanks to all in the community for providing some great ideas.

Meet the CTPP 2000 Working Group

September 18, 2002 9:00 am – 12:00 noon	TRB Conference on Transportation Planning for Small and Medium-sized Communities Cincinnati, OH (http://www.toolsforthe21stcentury.org/default.htm)
October 6-8, 2002	Western Region IPG meeting, Anaheim, CA
January 12-16, 2003	TRB Annual Conference, Washington, DC
April 6-11, 2003	TRB Conference on Applications in Transportation Planning Baton Rouge, LA (http://www.ltrc.lsu.edu/TRBConference/)

US DOT Update on Census Issues

By Elaine Murakami, Federal Highway Administration

2000 Urbanized Area Definitions

For information about Urbanized Area definitions and impacts for MPOs and TMAs, please visit: <http://www.fhwa.dot.gov/planning/census/cengeo.htm>

For information about Urbanized Area and Urban Cluster definitions and impacts for Highway Functional Class and HPMS reporting, please visit: <http://www.fhwa.dot.gov/ohim/faqs.htm>

CTPP Profile sheets

The first product available from the CTPP is a 2-page profile, limited to counties (and MCD's in selected states – Massachusetts, Connecticut, New Hampshire, Maine, Vermont, and Rhode Island). This 2-page sheet includes 1990 and 2000 data for basic characteristics such as household size, vehicle availability, means of transportation to work, travel time to work and time leaving home to go to work. It also includes 2-way cross-tabulations for: Means of Transportation to Work by Travel Time, and Household Size by Number of Vehicles Available.

We are working with AASHTO to post the information on their webpage. We expect the profiles to be available in October 2002. For more information, please contact Dave Clawson at AASHTO, davidec@aashto.org

ACS research

The NCHRP 08-48, "Using American Community Survey for Transportation Planning" held its first meeting on August 15-16, 2002 at the new TRB facilities. The panel, chaired by Alan Pisarski, drafted a Scope of Work, focusing on how ACS data can be used for transportation planning and on development of a guidebook for state DOTs and MPOs. RFP was released by NCHRP on August 27, 2002 with responses due by October 17, 2002 (<http://www4.trb.org/trb/crp.nsf/rfps>). The panel will meet on November 14-15 to select a contractor.

Other ACS research activities at the USDOT include:

- a. Seasonality research using Hampden County, MA data, by Emily Parkany, Univ of MA.
- b. Place of work coding using San Francisco, CA data, by Deb Niemeier, UC Davis (not yet approved by CB).
- c. On-site research at CB offices in Suitland, Maryland. This research will begin with contract researchers funded by FHWA and will then shift to BTS staff.

CTPP Outreach Goes On Line

By Ed Christopher, Federal Highway Administration; and chair of TRB Committee on Urban Transportation Data & Information Systems.

The video, "A CTPP Day," is now available online at <http://mrc.fhwa.dot.gov/> and hosted by the FHWA Midwestern Resource Center.

"A CTPP Day," in just seven minutes, presents a light-hearted but serious look at the uses and application of the CTPP data. While planners and users of the data will certainly relate to the video, it was developed as a means of communicating the importance of the CTPP to the members of the policy and technical committees involved in regional planning processes around the country.

This video, along with printed brochures, was distributed to MPOs and State DOTs earlier this year. One goal of these products is to assure that technical and staff resources would be allocated to work with the CTPP data. Our goal is to make the CTPP easy to use, but without hardware and software for mapping, or staff to examine the data, the value of the data will be lost. For technical issues regarding the playback of "A CTPP Day", please contact Clayton Marcuson of the Midwestern Resource Center at 708-283-3593. To request CTPP brochures, please contact Nanda Srinivasan at 202-366-5021 or by email at nanda.srinivasan@fhwa.dot.gov.

The CTPP Working Group is now working with a consultant to develop a self-paced electronic guidebook. The guidebook, when finished, will be a CD-Rom-based learning tool to assist planners with the technical aspects and applications of the data. The electronic guidebook is expected to be available at the beginning of 2003.

TRB Census Subcommittee - A1D08 (a) : Message from the Chair

As many of you eagerly begin or anxiously wait to begin analyzing the data available in SF3, care should be taken in developing findings from the analysis. Presentation of data rests in the ability of the analyst to "tell the story". As the two articles in this newsletter demonstrate, there are many pitfalls in interpreting and displaying data. The use of percentages or absolute numbers can tell a different story to different people. Also, there usually is a need to use other data to support the analysis. A unique difference in most analytical work today however is instant (sometime too!) communication with colleagues, as evidenced by the use the CTPP listserv.

We now can begin to "tell our story" using small area data from the SF3. To this end, the TRB Census subcommittee has received about a dozen potential presentations for our Poster Session at TRB in January. I hope you will have a minute to stop by and see some of the analyses that have been done. I'm sure you'll walk away inspired to present in 2004. Or, if you can't wait until January 2004, join us at the Transportation Planning Applications Conference in Baton Rouge (April 6-11, 2003) to share your research endeavors. We will have a session at this conference to address current Census activities, MPO use of census products and interaction between attendees and presenters.

Bob Sicko, Mirai Associates bob@miraiassociates.com
Chair, TRB Subcommittee on Census Data for Transportation Planning